## Abstract

An ion-sensitive sensor arrangement includes: A semiconductor chip 1 having a first surface, which has a media-sensitive region 4 and at least one, first, electrical contact surface 2, 3; and a support 6 having a second surface, which faces the first surface of the semiconductor, has an opening 7, which aligns with the sensitive region 4, and at least one, second, electrical contact surface 8, 9, which overlaps, or aligns with, the at least one, first, electrical contact surface; wherein, between the support and the semiconductor chip, a preferably elastic, anisotropic conductor 5 is arranged, which produces a conducting connection between the at least one, first, contact surface and the at least one, second, contact surface, and which has a traversing opening, which aligns with the opening 7 in the second surface, so that the sensitive region 4 of the semiconductor chip 1 can be contacted through the opening by an analyte, wherein the preferably elastic, anisotropic conductor 5 seals the region outside of the opening 7 against contamination with the analyte.

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